

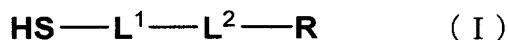
**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for immobilizing nucleic acid on a solid phase-substrate by co-adsorption, comprising:

~~forming a composition bringing the solid phase substrate into contact with a composition comprising:~~

a total concentration of 0.1 to 2  $\mu$ M of a nucleic acid as a probe, and  
a compound or a salt thereof, the compound being represented by the following formula:



where:

$\text{L}^1$  is a single bond or a C<sub>1-15</sub>-alkylene ~~an alkylene group having 1 to 15 carbon atoms;~~

$\text{L}^2$  is selected from the group consisting of a single bond, a nucleic acid, a polyethylene glycol group, -CO-NH-, ~~or~~ and -NH-CO-;

$\text{R}$  is selected from the group consisting of a hydroxyl group, an amino group, a ferrocenyl group, ~~or~~ and a carboxyl group; and

$\text{L}^1$  and  $\text{L}^2$  are not both single bonds; and

then bringing the solid phase substrate into contact with the composition; and  
incubating the composition in contact with a surface of the solid phase

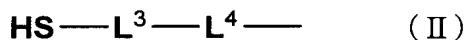
substrate.

wherein the composition comprises a nucleic acid and a compound represented by formula I at a ratio of 40/60 to 60/40.

2. (Currently Amended) The method according to claim 1, wherein:

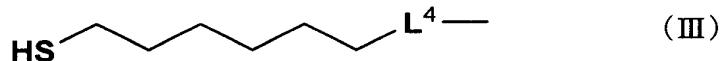
the nucleic acid as a probe comprises a single-stranded polynucleotide or an oligonucleotide consisting of modified or unmodified nucleotides selected from the group consisting of, single-stranded DNA, RNA, PNA, amino cyclohexanyl nucleic acid, or and hexitol nucleic acid.

3. (Currently Amended) The method according to claim 1, wherein the nucleic acid as the probe comprises at the a 3' end or the a 5' end a group represented by the following formula:



wherein  $\text{L}^3$  is a  $\text{C}_{1-15}$ -alkylene an alkylene group having 1 to 15 carbon atoms, and  $\text{L}^4$  is a single bond or a spacer.

4. (Currently Amended) The method according to claim 1, wherein the nucleic acid as the probe has at the a 5' end a group represented by the following formula:



wherein  $\text{L}^4$  is a single bond or a spacer.

5. (Currently Amended) The method according to claim 4, wherein  $\text{L}^4$  is selected from the group consisting of a nucleic acid, -CO-NH-, -NH-CO-, a polyethylene glycol group, and a polyethylene glycol phosphate group.

6. (Currently Amended) The method according to claim 1, wherein the total concentration of the nucleic acid and the compound represented by formula I or the a salt thereof in the composition is 0.5 to 1.5  $\mu\text{M}$ .

7. (Currently Amended) The method according to claim 1, wherein the total concentration of the nucleic acid and the compound represented by formula I or the a salt thereof in the composition is 1  $\mu\text{M}$ .

8. (Canceled)

9. (Currently Amended) The method according to claim 1, wherein R in the compound represented by formula I is a hydroxyl group.

10. (Withdrawn) The method according to claim 1, wherein L<sup>1</sup> in the formula I is a single bond, and L<sup>2</sup> is a polyethylene glycol group.

11. (Currently Amended) The method according to claim 1, wherein L<sup>1</sup> in the compound represented by formula I is a C<sub>4-8</sub>-an alkylene group having 4 to 8 carbon atoms, and L<sup>2</sup> is a single bond.

12. (Currently Amended) The method according to claim 1, wherein the formula represented by compound I is 6-mercaptop-1-hexanol.

13. (Original) The method according to claim 1, wherein the solid phase substrate is a single layered substrate or a multiple layered substrate comprising at least one material selected from the group consisting of glass, polymer resin and metal.

14. (Currently Amended) The method according to claim 1, wherein ~~the~~<sup>a</sup> surface of the solid phase substrate on which nucleic acid is adsorbed is coated with a thin gold film.

15. (Currently Amended) The method according to claim 1, wherein the solid phase substrate ~~is comprises~~ a glass substrate ~~with and~~ a thin gold film vapor-deposited on its ~~a surface of, and may further comprises, at least one intermediate layer between the thin gold film and the glass substrate.~~

16. (Currently Amended) The method according to claim 1, wherein the nucleic acid as the probe has a base length of 15 to 30 base length nucleotides.

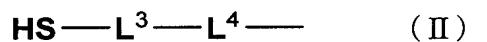
17. (Original) The method according to claim 1, wherein the incubation is carried out at a temperature of 25° C to 40° C.

18. (Currently Amended) The method according to claim 1, wherein:

the nucleic acid as the probe is comprises:

a single-stranded polynucleotide or an oligonucleotide comprising nucleotides selected from the group consisting of single stranded DNA, RNA, and PNA, and may also have the group represented by formula II; PNA; and

at the 3' end or the 5' end a group represented by the following formula:



wherein L<sup>3</sup> is an alkylene group, and L<sup>4</sup> is a single bond or a spacer; the formula represented by compound I is 6-mercaptop-1-hexanol; the total concentration of the nucleic acid and 6-mercaptop-1-hexanol in the composition is 0.5 to 1.5 μM; and

the solid phase substrate is comprises a glass substrate with and a thin gold film vapor-deposited on its a surface of the glass substrate, and further, at least one intermediate layer may be made exist between the thin gold film and the glass substrate.

19-25. (Cancelled)